

Application No.: 10/743,390
 Response dated November 28, 2005
 Office Action dated August 4, 2005

Docket No.: 21581-00311-US

IN THE SPECIFICATION:

Please amend Table 1 on page 27 to read as follows:

Table 1

	Chemical conversion treatment	Coat amount (mg/m ²)	Drying condition	Fluorine concentration (in a chemical conversion coat at %)	Sludge	SDT
Ex. 1	Zirconium	35	80°C x 5min.	8.7	⊕	⊕
Ex. 2	Zirconium	33	35°C x 10 min.	9.8	⊕	⊕
Ex. 3	Zirconium	31	35°C x 60 min.	6.7	⊕	⊕
Ex. 4	Zirconium	37	120°C x 5 min.	7.4	⊕	⊕
Ex. 5	Zirconium	39	170°C x 5 min.	5.7	⊕	⊕
Ex. 6	Zirconium	36	180°C x 3 min.	5.7	⊕	⊕
Compar. Ex. 1	Zirconium	33	Without drying	—	⊕	✱
Compar. Ex. 2	Zirconium	30	25°C x 10 min.	10.3	⊕	✱
Compar. Ex. 3	Zinc phosphate	—	Without drying	—	✱	⊕
Compar. Ex. 4	Zinc phosphate	—	80°C x 5 min.	—	✱	⊕

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Table 1

	<u>Chemical conversion treatment</u>	<u>Coat amount (mg/m²)</u>	<u>Drying condition</u>	<u>Fluorine concentration (in a chemical conversion coat at %)</u>	<u>Sludge</u>	<u>SDT</u>
<u>Ex. 1</u>	<u>Zirconium</u>	<u>35</u>	<u>80°C x 5 min.</u>	<u>8.7</u>	<u>0</u>	<u>0</u>
<u>Ex. 2</u>	<u>Zirconium</u>	<u>33</u>	<u>35°C x 10 min.</u>	<u>9.8</u>	<u>0</u>	<u>0</u>
<u>Ex. 3</u>	<u>Zirconium</u>	<u>31</u>	<u>35°C x 60 min.</u>	<u>6.7</u>	<u>0</u>	<u>⊙</u>
<u>Ex. 4</u>	<u>Zirconium</u>	<u>37</u>	<u>120°C x 5 min.</u>	<u>7.4</u>	<u>0</u>	<u>⊙</u>
<u>Ex. 5</u>	<u>Zirconium</u>	<u>39</u>	<u>170°C x 5 min.</u>	<u>5.7</u>	<u>0</u>	<u>⊙</u>
<u>Ex. 6</u>	<u>Zirconium</u>	<u>36</u>	<u>180°C x 3 min.</u>	<u>5.7</u>	<u>0</u>	<u>⊙</u>
<u>Compar. Ex. 1</u>	<u>Zirconium</u>	<u>33</u>	<u>Without drying</u>	<u>-</u>	<u>0</u>	<u>x</u>
<u>Compar. Ex. 2</u>	<u>Zirconium</u>	<u>30</u>	<u>25°C x 10 min.</u>	<u>10.3</u>	<u>0</u>	<u>x</u>
<u>Compar. Ex. 3</u>	<u>Zinc phosphate</u>	<u>-</u>	<u>Without drying</u>	<u>-</u>	<u>x</u>	<u>⊙</u>
<u>Compar. Ex. 4</u>	<u>Zinc phosphate</u>	<u>-</u>	<u>80°C x 5 min.</u>	<u>-</u>	<u>x</u>	<u>⊙</u>

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Please amend Tables 2 and 3 on page 28 to read as follows:

Table 2

	Coat amount (mg/m ²)	Added element	Additive	Drying condition	Fluorine concentration (in a chemical conversion coat at %)	Sludge	SDT
7	35	Zn	—	25°C x 10 min.	8.8	⊕	⊕
8	49	Zn, Mg	—	25°C x 10 min.	6.9	⊕	⊕
9	37	Zn, Si	—	25°C x 10 min.	7.2	⊕	⊕
10	51	Mg, Si	—	25°C x 10 min.	4.8	⊕	⊕
11	39	Cu	—	25°C x 10 min.	5.3	⊕	⊕
12	42	Zn	—	80°C x 5 min.	6.5	⊕	⊕
13	38	Silane coupling agent A	—	—	4.8	⊕	⊕
14	43	Mg	Water- borne resin A	—	4.5	⊕	⊕
15	39	Mg, Zn, Silane coupling agent B	—	—	4.9	⊕	⊕

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Table 3

	Coat amount (mg/m ²)	Basic aqueous solution	Treatment condition	Fluorine concentration (in a chemical conversion coat at %)	Sludge	SDT
Ex. 16	32	Ammonium hydroxide	pH10 50°C x 3 min.	3.1	+	⊖
Ex. 17	28	Ammonium hydroxide	pH9 50°C x 10 min.	5.3	+	⊖
Ex. 18	35	Potassium hydroxide	pH12 40°C x 3 min.	1.0	+	⊖
Ex. 19	36	Lithium hydroxide	pH12 40°C x 3 min.	1.1	+	⊖
Ex. 20	33	Sodium hydroxide	pH9 50°C x 5 min.	1.0	+	⊖
Compar. Ex. 5	35	Ammonium hydroxide	pH8 50°C x 10 min.	10.5	+	98

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Table 2

	<u>Coat amount (mg/m²)</u>	<u>Added element</u>	<u>Additive</u>	<u>Drying condition</u>	<u>Fluorine concentration (in a chemical conversion coat at %)</u>	<u>Sludge</u>	<u>SDT</u>
<u>7</u>	<u>35</u>	<u>Zn</u>	<u>-</u>	<u>25°C x 10 min.</u>	<u>8.8</u>	<u>o</u>	<u>o</u>
<u>8</u>	<u>49</u>	<u>Zn, Mg</u>	<u>-</u>	<u>25°C x 10 min.</u>	<u>6.9</u>	<u>o</u>	<u>⊙</u>
<u>9</u>	<u>37</u>	<u>Zn, Si</u>	<u>-</u>	<u>25°C x 10 min.</u>	<u>7.2</u>	<u>o</u>	<u>⊙</u>
<u>10</u>	<u>51</u>	<u>Mg, Si</u>	<u>-</u>	<u>25°C x 10 min.</u>	<u>4.8</u>	<u>o</u>	<u>⊙</u>
<u>11</u>	<u>39</u>	<u>Cu</u>	<u>-</u>	<u>25°C x 10 min.</u>	<u>5.3</u>	<u>o</u>	<u>⊙</u>
<u>12</u>	<u>42</u>	<u>Zn</u>	<u>-</u>	<u>80°C x 5 min.</u>	<u>6.5</u>	<u>o</u>	<u>⊙</u>
<u>13</u>	<u>38</u>	<u>Silane coupling agent A</u>	<u>-</u>	<u>-</u>	<u>4.8</u>	<u>o</u>	<u>⊙</u>
<u>14</u>	<u>43</u>	<u>Mg</u>	<u>Water- borne resin A</u>	<u>-</u>	<u>4.5</u>	<u>o</u>	<u>⊙</u>
<u>15</u>	<u>39</u>	<u>Mg, Zn, Silane coupling agent B</u>	<u>-</u>	<u>-</u>	<u>4.9</u>	<u>o</u>	<u>⊙</u>

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	<u>Coat amount (mg/m²)</u>	<u>Basic aqueous solution</u>	<u>Treatment condition</u>	<u>Fluorine concentration (in a chemical conversion coat at %)</u>	<u>Sludge</u>	<u>SDT</u>
<u>Ex. 16</u>	<u>32</u>	<u>Ammonium hydroxide</u>	<u>pH10 50°C x 3 min.</u>	<u>3.1</u>	<u>0</u>	<u>⊙</u>
<u>Ex. 17</u>	<u>28</u>	<u>Ammonium hydroxide</u>	<u>pH9 50°C x 10 min.</u>	<u>5.3</u>	<u>0</u>	<u>⊙</u>
<u>Ex. 18</u>	<u>35</u>	<u>Potassium hydroxide</u>	<u>pH12 40°C x 3 min.</u>	<u>1.0</u>	<u>0</u>	<u>⊙</u>
<u>Ex. 19</u>	<u>36</u>	<u>Lithium hydroxide</u>	<u>pH12 40°C x 3 min.</u>	<u>1.1</u>	<u>0</u>	<u>⊙</u>
<u>Ex. 20</u>	<u>33</u>	<u>Sodium hydroxide</u>	<u>pH9 50°C x 5 min.</u>	<u>1.0</u>	<u>0</u>	<u>⊙</u>
<u>Compar. Ex. 5</u>	<u>35</u>	<u>Ammonium hydroxide</u>	<u>pH8 50°C x 10 min.</u>	<u>10.5</u>	<u>0</u>	<u>x</u>